*U.S.S. Arleigh Burke DDG-51.*
*Department of Navy photo*

# BREAKING DOWN THE "STOVEPIPES"

## *Information Technology's Role in Solving the Navy's Logistics Support Challenge*

*Cmdr. Russell G. Acree, Jr., USN • William H. Money*

For many years, the United States Navy, like many other large public and private organizations, has attempted to implement large-scale organization changes. Among the changes attempted are significant efforts to maintain, synchronize and integrate access to databases that are geographically widely distributed and administered, and supported by separate functional command and decision making structures.

**Background**

The Surface Navy's change efforts have been underway since the mid-1980s. At the climax of what was then called the "Revolution at Sea," Vice Adm. Joseph Metcalf, a former Deputy Chief of Naval Operations for Surface Warfare (OP-03), proclaimed this goal with dramatic overtones:

> Lead, follow, or get out of the way. This is not a job just for the Admirals. This revolution is an all-hands working party, committed for the long-pull.

His was a quest born of personal conviction and vision that only by radical and comprehensive reassessments of roles, missions, systems, technologies and operational practices, and addressing numerous "religious issues" that worked to impede clarity of thought, purpose and action, could the Navy's surface combatants of the future place maximum ordnance on target.

Organizational limitations and delays in developing software tools, control processes and communication methodologies for indexing, accessing, updating and sharing data across remotely distributed databases prevented the computer from becoming an important (if not critical) ingredient in this process. Since the publication of the Navy-Marine Corps white paper, *From the Sea*, in early fall 1992, the Navy labored to make ready for the 21st Century.

The Department of the Navy is addressing strategy, policy, doctrine, force structure, operations, tactics, shore-side infrastructure, and a myriad of other factors from the top-down and bottom-up in what some see as a "no-holds-barred, nothing-is-sacred" assessment. Their ultimate goal is to ensure that requirements and resources are better aligned, and that missions are fulfilled without a return to the "hollow Navy" of the 1970s.

This perspective led the Navy to an understanding that a new set of environmental, technical and organizational pressures made computer support for database integration more important for success, and far more possible and affordable than it was in the past. In addition, new information system technologies, and the availability of new communication management tools improved the ability of organizations to meet the growing demands for database support.

Today's Navy faces an environment that now restricts staffing and distributes among disparate command structures the responsibility for supporting logistics support tasks with data and documentation. Yet, the Navy also demands extremely rapid modifications to logistics support and operations support data. Such modifications can only be realized by integrating new information systems tools with the mechanisms that access and

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*Cmdr. "Rusty" Acree, USN, is a Professor of Information Systems Education Management, DSMC. He is a career Surface Warfare officer who, while assigned to the staff of the AEGIS Program Manager, developed applications of information technology for managing technical documentation and logistics support data for AEGIS class ships.*

*Dr. Money is an Associate Professor of Information Systems, George Washington University. His research has focused on information system development tools and methodologies and the impact of workflow systems and Artificial Intelligence on task performance.*

update dispersed organizational information systems.

This article describes the design and implementation of a database coordination and integration system for several of the logistics support processes for the Navy's newest surface combatant — the *Arleigh Burke* class guided missile destroyer. This project, one of the remaining vestiges of Vice Adm. Metcalf's vision, is in keeping with the long-term goal of the Navy to do more with less, while not sacrificing the ability of the U.S. Navy to conduct prompt and sustained combat operations at sea anywhere in the world. Most importantly, the technology and capability emerging from the project has the potential to be transitioned to any business process (government or the private sector), thereby capturing the cost savings benefits of fundamental business process reengineering.

## An Information Architecture

The Navy is moving toward an organization-wide information architecture, identified with a set of systems and projects to implement mission requirements. This information architecture is composed of shared databases and application systems. Its role is to collect, store and provide access to the Navy's logistics support, training, engineering data and other logistical support data, as required. Databases and shared applications must be designed with common business objectives, and development projects must be implemented using cross functional teams to design the new integrated systems.

One experimental project, linked to the Navy's and the Defense Department's Computer-aided Acquisition and Logistics Support (CALS) effort, is being undertaken by the Navy's AEGIS Program as a method to decrease weapon systems life-cycle costs of the Navy's *Arleigh Burke* (DDG 51) class guided missile destroyers. Embodying the philosophy of "build-a-little, test-a-little, learn-a-lot," the DDG 51 class Integrated Logistics Support (ILS) Improvement Project responded to Vice Adm. Metcalf's challenge. The Project is now in position, and the Navy expects it to —

- evoke reengineering of fundamental logistics support business processes within the AEGIS Program; and
- be the catalyst for fundamental business process reengineering for the way the Navy manages technical documentation, trains sailors and maintains complex weapons systems in the 21st Century.

The AEGIS Program's *raison d'etre* is the design, construction, outfitting and delivery of AEGIS warships to the fleet, and the planning and execution of modernization and lifetime support for those ships, i.e., "total support, from cradle to grave." Indeed, from its inception more than two decades ago, this Surface Navy program always embraced three key commitments:

- to deliver the most modern, affordable, capable and war-ready ships in the world;
- to provide the best and most affordably trained officers and sailors to man those ships; and
- to maintain the readiness and modernization of those ships at the highest possible state throughout their service lives.

Today, 27 *Ticonderoga* class AEGIS guided missile cruisers are in commission. Seven *Arleigh Burke* class AEGIS guided missile destroyers have been delivered, with another 22 either under construction or under contract. A total of 58 destroyers are planned.

## Reducing Costs By Recapitalizing the Navy

The system criteria for assessing whether or not logistics support requirements for ship systems and equipment are effectively met for the cruisers and destroyers have now changed dramatically. But the computer support tools to support systems designed to integrate these requirements have not kept up with the requirements evolution. In addition, the criteria used to assess the effectiveness of meeting requirements shifted in their relative importance. The Navy is now using a new set of criteria that stress effective systems integration as the measure of success for information systems that attempt to address an organization's needs. This article identifies four new criteria: **speed**, **change distribution**, **auditability and labor efficiency**.

These new system criteria address several military business problems associated with the limitations of the current Navy stovepipe information systems. First, the Navy must now update its separate logistics support databases in a very short period of time. Therefore, speed is a critical factor in assessing the overall success of a management information system support process. Second, the Navy must ensure that all changes made to the data are completely propagated to the other stovepipe systems (databases). Third, the Navy must audit the common and shared data among the stovepipe systems, and assure that all data are correctly entered, updated and fully synchronized. Finally, the Navy's logistics support methodology must now be executed in accordance with new staffing limitations imposed by Congressionally mandated downsizing.

A critical underlying factor associated with each criterion of the Navy's program to ready the Naval Service for the next millennium is the Navy's requirement to reduce shore-side and other support infrastructure costs. This will allow the Navy to "re-capitalize" itself and maintain a sufficient force structure of trained and motivated people to meet the needs of the future. Additionally, reducing support infrastructure costs will allow "right-sizing" the fleet for the Navy's continu-

ing extensive political-military commitments within the very real and austere fiscal constraints of today.

Reducing the expensive shore-side infrastructure required to support the *Burke* class destroyer is one objective of the AEGIS Program Manager's DDG 51 ILS Improvement Project. The solution lies in the capability of today's Information Technology (IT) and IT's ability to integrate information horizontally across an organization.

### A Growing Navy Logistics Support Challenge

The Navy now faces complex reengineering and process innovation challenges. To solve these challenges, the Navy expects its Navy information systems to meet some or all of the different, and in many cases, heightened criteria previously identified. These new criteria (speed, change distribution, auditability, and labor efficiency) may appear to alter the original system requirements and assessment criteria, which previously emphasized data input, retrieval, processing or calculation, and production functionality for predefined reports as the critical measures of effectiveness.

This change was observed in other information systems environments. For example, Orlikowski[1] cites the rationale for the adoption and use of Computer-Aided Software Engineering (CASE) tools as being in part derived from information systems managers' desire to implement a new methodology and corporate architecture that would facilitate the redesign of business units.

This documented attempt to influence business operations represented a change from previous functions that the information systems group supported in the organization. It is an added requirement (or an additional criteria) that may be used to assess the effectiveness of the information system of the organization studied.

**The role of information systems is to implement strategic systems plans, and to collect, store and provide access to all of the organization's data, as required.**

To meet this criteria, the organization must no longer attempt to develop stand-alone functional information systems with the support of specific units within the organization.

Orlikowski cites specific examples where organizations now modify their information architecture and implement the organization's requirements and evaluation criteria with new systems and projects. The new information architectures are composed of shared databases and application systems. The role of information systems is to implement strategic systems plans, and to collect, store and provide access to all of the organization's data, as required. Databases and shared applications are funded through common mechanisms, and development projects depend on cross functional teams to implement new integrated systems.[2]

Today's Navy appears to face a very similar challenge, with a similar solution. The Navy's logistics support environment must incorporate the support data associated with rapid changes in technologies used on ship's equipment and the fleet's weapons systems. Its support environment must also complete upgrades in support systems, logistics support data, training requirements and technical documentation. These rapid changes can only be realized by using systems tools that are integrated with other organizational support systems.

Navy managers must select a mix of tools and systems to support all of the organizational facets of integration and concentrate on using these tools to coordinate the Navy's diverse logistics tasks. This article describes how the Navy's AEGIS Program is redefining new requirements for logistics support systems and reevaluating criteria. This redefinition of requirements and reevaluation of criteria is intended to emphasize the use of information systems as organizational change tools for executing business process reengineering within the logistics support processes for the *Arleigh Burke* class destroyers.

### DDG 51 Logistics Support Requirements and Evaluation Criteria

The Navy's logistics support information systems are similar to systems found in many of today's corporate organizations. The systems combine many different features such as a Graphic User Interface (GUI) for front-end capture of information with a relational database, mechanisms for file storage and retrieval, and systems management controls using a workflow system. This systems environment is typical of organizations that are experiencing ongoing evolution in their information systems.

In general, these systems must store logistics data and supporting information in an organization memory that can be used within the organization. The organization memory will serve as a design and development data dictionary to support the ability to use the data model as a tool that can be used to demonstrate the char-

acteristics of the business relationships among the business units in the organization. The data model must be compatible with systems design and in implementation to show how departments and units are related to each other.

The tools that support these systems must link to the front-end, PC-based development environment of the organization, prototype- evolving applications, and integrate the various databases of the organization.

The AEGIS Program Manager, in the life-cycle support role for AEGIS class ships, funds the AEGIS Program's share of the Navy's enormous "stovepipe" logistics support organization for logistics support of AEGIS ships. Today, the Navy's logistics support infrastructure consists of separate and distinct organizational processes. In only rare instances (usually a crisis or other emergent situation that forces manual integration) do these processes interact with one another.

The AEGIS Program Manager focused the DDG 51 Logistics Support Improvement Project on horizontally interfacing information across six of the most important logistics processes that promise to return the most for the investment buck. These processes are —

1. *Planned Maintenance System (PMS)*. This system administers and accomplishes preventive maintenance afloat and ashore.
2. *Engineering Change Proposal (ECP) Process*. This is the process that reviews, approves, sequences and schedules proposed engineering changes.
3. *Allowance Parts Lists (APL)*. These are the parts lists every ship maintains, which specify the spare parts and quantities each ship shall carrry.
4. *Ship's Manning Documents (SMD)*. These are the documents that describe how a ship shall be manned in terms of required numbers of crew and their skill levels.
5. *Training*. This process provides for the correct training for ship's crews commensurate with the types of equipment and systems installed aboard the ship.
6. *Technical Manuals*. This process provides for the production and life-cycle maintenance of the Navy's equipment and systems technical manuals/documentation.

Each of these six organizational processes are executed by thousands of Navy uniformed, civilian and contractor support personnel who are widely dispersed geographically throughout the country. These processes are accomplished primarily in a paper environment, and employ "sneaker post" and the U.S. mail for connectivity. For example, it could be possible for a PMS feedback report originated from an Atlantic Fleet AEGIS ship, which recommended a change to an existing maintenance procedure, to pass through as many as three separate shore support organizations — COMNAVSURFLANT in Norfolk, VA; COMNAVSEALANT in Norfolk, VA; and the Philadelphia detachment of the Naval Surface Warfare Center ( Carterock Division) — before the change, if approved, is finally disseminated to all AEGIS ships.

Significant problems arise with this process if the new change in maintenance procedures recommended by that Atlantic Fleet ship drive other changes requiring —

1. additional training for maintenance personnel;
2. different spare parts;
3. revisions to a technical manual/ operators manual; or
4. a reduction or increase in ship's manning requirements.

It may be many months before all of the changes are entered into "the system" correctly, and much longer before those changes ever reach the deckplates aboard an AEGIS destroyer.

## Major Components of the System

The basic objectives of the DDG 51 program are to use standard IDEF modeling techniques to define the data, processing requirements and workflows of the current logistics support process, i.e., the "as is" process, then, to employ Information Technology to replicate the process. Later, close examination of the "as is" IDEF model allows for calling into question each sub-process to determine its value in accomplishing the overall process. Process reengineering can now begin using information technology to replicate the reengineered workflow processes. If this sounds a lot like Total Quality Leadership/Total Quality Management, it's because that's exactly what is.

The system's current major components are the **product locator**, a **workflow management** system, and the six remotely distributed and maintained **databases**. The system used by the Navy requires a logical organizational data model and a relational database that allow for creative use of the relationships to identify and solve data association logistics support problems. The goal was to use the model to eliminate unsynchronized entries into databases, and to avoid building and storing complex rules that must be memorized and used by employees.

The **product locator** is a crucial portion of the system that provides the logical data model. It serves as the essential database and driver for the coordination of all change drivers, and for locating logistics support equipment data. It contains a data model that stores the data that are used in the stovepipe engineering and documentation system designs, and may contain relationship data that indicate how various documentation and support databases are related to each other. The system is loaded with

data that provide the information and guidance to make integrated and coordinated changes in the —

- Allowance Parts List;
- Technical Manuals; and
- Navy Training Plan and Manning Documents Planned Maintenance System Documentation.

**Engineering Change Proposal Process**

It is important to understand that the support processes being integrated using this approach are widely dispersed in geographic locations and are disparate in implementing technologies. As an example, the AEGIS Engineering Change Proposal (ECP) Process infrastructure for the Machinery Control System (MCS) aboard the Burke class destroyers is comprised of the prime contractor, Martin Marietta Corporation, Daytona, Fla.; the AEGIS Program's Change Control Board (CCB) in Washington, D.C.; the Naval Sea Systems Command also in Washington, D.C., which is the MCS life-cycle manager; the Philadelphia detachment of the Naval Surface Warfare Center - Carterock Division; the Supervisor of Shipbuilding, Bath, Maine; and the lead shipbuilder of the Burke destroyer, Bath Iron Works in Bath, Maine.

The development of the product locator by the Navy is a strategic step in the implementation of newer information system technologies to overcome the limitations of the organization's old and costly, manual, stovepipe-like environment. The new system is a conscious effort to modify the uncoordinated flow of information for logistics support functions that previously supported the independent processes and sub-processes.

Observations indicate that the stovepipes' support processes were primarily geared for production activities, and were not oriented toward answering management questions, supporting analysis of business information, or assuring that correct and

**The benefits from the product locator are particularly important to the Navy in the multiple database access areas.**

complete changes had been made to all support documentation in all of the other stovepipe systems for logistics support. The benefits from the product locator are particularly important to the Navy in the multiple database access areas. The current stovepipe processes made it difficult to track multiple sources of logistics support data for one piece of equipment.

Logistics support changes made at different times or with slight variations in the name of the equipment or part modified are not always available for the sailor (and different organizations may have updated the data at different points in time). The impact of this problem is twofold. The sailor is confused, and the Navy must develop further complex training procedures to correctly use its rather unique and uncoordinated stovepipes (a direct cost to the organization).

A common product locator database under development by the AEGIS Program Manager for the logistics support of the *Arleigh Burke* DDG-51 class destroyer solves the problem because a single source can be examined to identify all of the ship's equipment and systems support data storage locations maintained by the Navy. Associations among the data can be reviewed. The overall result is better logistics support service, reduced training and decreased cost to the Navy.

**Workflow Management**

Systems design and development literature emphasizes the enormous productivity and potential integration benefits from the increased systems connectivity available in today's information system technologies. These benefits can begin to be tapped using the **workflow management** component of the DDG 51 ILS system when this system is combined with the product locator capability.

The workflow system has the capability of routing images and files throughout the logistics support organization network. It may contain embedded timers to check for the occurrence of an event or action. A file may be created in a special directory, and a process or transfer of data initiated to continue the logistics support processing. This enables the work to be monitored as it passes through the different functional areas. If the files or "folders" are backed up in one area for any reason, the work may be reassigned to another area for completion. The workload balancing enables all of the logistics support update tasks to be effectively sequenced and scheduled.

The workflow system may also be used to establish mailboxes, define processing routines, set timing and triggers for the execution of routines, establish processing diaries, maintain comments, and construct forms for use in systems processing. It has many multi-user capabilities that support the integration required across the different functions performed in the stovepipe systems. This helps to solve the enormous and expensive logistics support challenge that the Navy faces.

In perspective, the Navy is in a crisis as to how to manage all this information. Until now, the Navy was constrained to manage all this logis-

tics support information using paper-oriented, page-based manual processes because the information technology required was either not available or not affordable.

The Chief of Naval Operations (Logistics), for example, estimates that the Navy produces 22.5 million page changes to technical manuals alone per year, using approximately 1,000 sailor man-years of effort per year, and costing the taxpayer approximately $400 million. For the AEGIS Program Manager, maintaining technical documentation for the sophisticated and highly complex AEGIS Weapon System (AWS) is proportionately just as expensive. The Navy has already begun transitioning AWS technical documentation from paper-based formats to highly interactive, digital format.

Similar problems exist in many other areas, such as the spare parts problem aboard an AEGIS destroyer. An AEGIS destroyer has approximately 23,000 spare part line items, with each item carrying its own distinctive part number. Each line item consists of at least one spare part, and most commonly there may be carried more than 1 unit of the same numbered stock item. In all, an AEGIS destroyer typically carries six times the number of spare part line items or approximately 138,000 spare parts.

To illustrate the enormity of the logistics crisis facing the Navy and all of the Uniformed Services, and to put this crisis in the perspective of simply being an **information management problem**, imagine a "worst-case" scenario where a sailor aboard an Atlantic fleet AEGIS ship identifies an electronic circuit card problem in the ship's MCS. The sailor immediately and correctly submits a feedback report on the problem, as required. For routine, non-safety related feedback reports, it takes a very long time (possibly months) to alert all other ships about the problem, its resolution, and the materials and instructions needed to fix the problem aboard other AEGIS ships.

In the interim, another sailor aboard an AEGIS ship in the Arabian Sea encounters the same problem. Not knowing his or her manuals and technical documentation are no longer correct, the sailor unwittingly attempts to fix the first problem. Incorrect tests are performed and ultimately, further damage occurs. The sailor attempts to obtain repair circuit cards from supply, but finds that they too are incorrect because the APL (allowance parts list) is outdated. New parts are requested. The correct parts arrive in 2-5 days, but problems still persist in the system, and the outdated technical manuals fail to cover these new problems.

Finally, the ship requests technical assistance. Support personnel (technical assistance team consisting of one or more technicians) are flown from the U.S. to Saudi Arabia and transferred to the ship. Armed with the correct technical information and skills, the technical assistance team quickly restores the MCS to full capability. Although this is a "worst-case" scenario, varying degrees of this scenario are all too common, tremendously expensive, and caused simply by inefficient information management.

## The Navy Is Solving An "Academic" Problem

Organization theory literature views the level of integration achieved between the decision makers in an organization or system as a concept representing the "quality of collaboration actually achieved between organizational units."[3] The problem solved through integrative organizational efforts is one of recomposing the segmented sub-systems and environments of an organization into a totally managed organization responding to a complete environmental problem, uncertainty or demand. The recomposition is necessary for the differentiated components of the organization, which may have adopted different goals and objectives.

The theory of integration stresses information sharing as one of the important factors that contributes to a high level of integration achieved among the organizational sub-units. The sub-units must have available information and channels to exchange key data needed to solve problems and to perform tasks assigned to each sub-unit. The research of Lorsch and Allen suggested that integration is dependent upon the inter-unit relationships and decision making. How managers exchange information, resolve conflicts, and make joint decisions all influence the level of integration achieved.[4] March and Simon[5] viewed the level of integration as "the lowest level at which all activities relating to a particular goal can be coordinated through the formal authority mechanism." The task of integration cannot be placed at a lower level than the interaction between the decision makers in these sub-systems.

This coordination can be seen in the Navy's AEGIS program where the six logistics support processes are coordinated by "administrative levels" within the organization. In the past, this coordination occurred through the imposition of rules, procedures, and behavioral standards that govern the actions of different functional components of the Navy. These interfacing efforts are now being implemented (or imposed) by information systems technology that supports a truly coordinated approach to the solution of Navy logistic support problems.

## Plan for the Next Phase

The new system does not differ in data capture, front-end editing and task assignment/oversight when compared to the old paper trail and manual processes. In the present phase, electronically replicating the existing logistics support processes for the DDG 51 MCS is the objective. The benefits

here are derived simply by efficiencies gained with eliminating paper roadblocks and queues, and moving information internally and externally electronically. In this phase, no attempt was made to reengineer existing processes.

The next phase of the project had many options for demonstrating how artificial intelligence (AI) and decision support system (DSS) capabilities can be substituted for some subprocesses now done by people, thereby enabling reductions in support infrastructure and improving overall logistics support. For example, one option was to demonstrate how AI and DSS could improve processing by using a front-end data editing capability. Front loading with an expert system or decision support system to minimize errors in data entered into the system, assign the careful distribution of data among the systems, and to monitor updates to the databases might achieve significant reductions in existing support infrastructure.

Another option considered was to show how a decision support or expert system capability might enable the system to intelligently deal with any future changes that may occur in workflows of the major support processes ( i.e., PMS, ECPs, APLs, SMDs, TMs and training). If users modify their tasks, changes could potentially be propagated to the database or the business rules of the organization and eventually support AEGIS reengineering efforts.

The third option (selected for demonstration) was to use an expert system to meet requirements for the storage and implementation of the customized logistics information processing rules of the Navy. These are the rules that select work processing sequences and determine how changes to logistics documentation are maintained. A complete expert system might eventually contain hundreds of business rules for updating and handling the enormous amount of logistics documentation, engineering drawings, instructions and technical materials that are currently maintained only in written procedures or in the corporate knowledge of sailors, Navy civilian employees or contractor support personnel. Sometimes, even the rules themselves may be unwritten. It may take months or years to train a sailor, civilian government employee or support contractor to become completely proficient at managing a logistics support task and understanding the rules. Over time, the system could be used as a primary logic editor for the application and will probably increase in size as the ILS systems mature. Data to be included in the system could encompass training information and related data that are stored in job descriptions of the In-Service Engineering Agent (ISEA). These documents could include training manuals, business rules for each system, written guidelines and procedural manuals.

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As an example, the system will seek to demonstrate how it can be used as the business source of the rules that define what the MCS ISEA does to sort and sequence maintenance requests for system technical documentation and manuals when ECP-driven changes are processed. The expert system will demonstrate how it can provide data to the workflow management system, which checks tables to determine which tasks are to be performed next. If a status flag shows that a next task exists, the system will place the logistics support data, images, reports and associated documents in the electronic mailbox of the cognizant individual for further action.

Using this capability, the Navy could significantly increase managerial "what if" capabilities that can be derived from the databases and environmental information available to the maintenance personnel.

**Summary**

The evolving DDG-51 information systems environment is typical of organizations that are experiencing an ongoing evolution in their information systems, concurrent with changes in the organization. These information systems must now store information in an organization memory that is accessible to all users of the information to serve as a design and development data dictionary; and to support the ability of organization members to utilize the data model as a tool that can be used to characterize the business relationships among the sub-systems in the organization.

This means that the system must be capable of identifying the impact of organizational changes, identifying overlaps and duplication in data, and noting where and how task reengineering might impact operations by examining the business relationships identified through the data

stored in the systems of the organization.

The question of "how" to accomplish this is a primary concern for managers who face unintegrated systems such as many of those in today's government and business environments. Far easier is to describe what has happened in this Navy program and why the change appears to be occurring here, rather than to proactively state how new information systems can be developed and effectively implemented for similar complex environments. For the Navy, the change appears to have been both strategic, incremental and evolutionary.

The implementation of the product locator and its workflow components is being carefully assessed to minimize any negative impact on the DDG-51 project, and to implement a systems strategy to transfer this new technology throughout the AEGIS program. Many factors seem to play a part in making the success occur. The timing of the change was a clear issue. This may include the business and technical motivation of managers in both the Information Resource Management organization and in the AEGIS Program's functional areas. In addition, the evolution and availability of affordable computer programming tools, including the support tools, GUI front end, database, expert system, business rules, optical scanning and storage capability all appear critically important. For the AEGIS Program, price was also a critical issue. The high cost of mainframe tools would have made the adoption of a mainframe-based CASE system far less advantageous. Managers should continually evaluate the relationships between their Information Systems (IS) and business environment, and develop an ongoing approach to strategic planning that involves comprehensive strategies for adopting CASE and other tools that upgrade IS business and organizational support capabilities.

**Ed. Note**: This article is the basis for an elective course taught by Cmdr. Acree at DSMC on the role of Information Technology for managing DDG 51 ILS. Cmdr. Acree and Dr. Money presented this information at the Idaho National Engineering Laboratory (INEL) symposium in October 1994.

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# DAU TO DIRECT NEW ACQUISITION REFORM COMMUNICATIONS CENTER (ARCC)

In a 27 January 1995 memorandum to all staff and faculty at the Defense Systems Management College (DSMC), Brig. Gen. Edward Hirsch, USA (Ret.), Provost and Deputy Commandant, DSMC, announced the establishment of the Acquisition Reform Communications Center (ARCC). As a result of recommendations made by a Working Group formed at the request of Mrs. Colleen Preston, Deputy Under Secretary of Defense (Acquisition Reform), Dr. Paul Kaminski, Under Secretary of Defense (Acquisition and Technology) approved the immediate establishment of an ARCC, under the direction of the President, Defense Acquisition University (DAU).

The mission of the ARCC is *to provide timely, accurate, consistent, relevant, understandable information about how DoD is changing the way it acquires needed goods and services, so participants and stakeholders can make the best decisions and take the most effective actions.*

The ARCC, under the direction of the President, DAU, will consist of three full-time staff members. These staff members will be augmented and assisted, as required, by PAT members, Service and Agency partners and contractor support.

**ARCC Goal**

The ARCC's goal is to *change behavior* by—

- communicating a common Acquisition Reform message to the people we need to engage for lasting success;
- ensuring consistency of that message;
- creating synergy in communication efforts;
- promoting a rapid, effective communication process;
- focusing on learning, not broadcasting; and
- promoting use of success stories, lessons learned, incentives and recognition programs.

**ARCC Functions**

In partnership with the Services, Agencies, Associations, etc., the ARCC functions are to—

- gather information, success stories, lessons learned from Process Action Teams (PAT), Experts, Services, etc.;
- develop messages and instructional materials;
- disseminate messages and materials to deliverers (Services, Agencies, etc.);
- coordinate delivery;
- stimulate use of innovative communication vehicles;
- support new incentive and recognition programs;
- facilitate joint government-industry training;
- define metrics and collect data; and
- provide feedback.